ALTO-SHAAM®

Convection Oven

Electric

ASC-2E
WITH
Mobile Stand Option 5004687

ASC-4E
WITH
Stand Option 5003489

PLATINUM SERIES

Model:

ASC-2E
ASC-4E

Electronic Control

- **INSTALLATION**
- **OPERATION**
- **MAINTENANCE**

24•7 Your Service Hotline 1-800-558-8744

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Wire Diagrams
Always refer to the wire diagram(s) included with the unit for most current version.

Warranty
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DELIVERY

This Alto-Shaam appliance has been thoroughly tested and inspected to ensure only the highest quality unit is provided. Upon receipt, check for any possible shipping damage and report it at once to the delivering carrier. ***See Transportation Damage and Claims section located in this manual.***

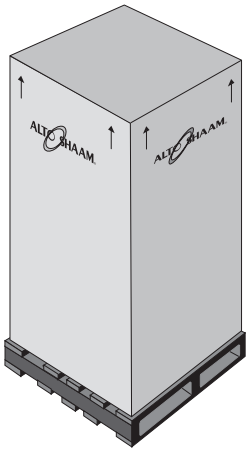
This appliance, complete with unattached items and accessories, may have been delivered in one or more packages. Check to ensure that all standard items and options have been received with each model as ordered.

Save all the information and instructions packed with the appliance. Complete and return the warranty card to the factory as soon as possible to ensure prompt service in the event of a warranty parts and labor claim.

This manual must be read and understood by all people using or installing the equipment model. Contact the Alto-Shaam Tech Team Service Department if you have any questions concerning installation, operation, or maintenance.

NOTE: All claims for warranty must include the full model number and serial number of the unit.

UNPACKING



1. Carefully remove the appliance from the carton or crate.

   NOTE: Do not discard the carton and other packaging material until you have inspected the unit for hidden damage and tested it for proper operation.

2. Read all instructions in this manual carefully before initiating the installation of this appliance.

   DO NOT DISCARD THIS MANUAL.
   This manual is considered to be part of the appliance and is to be provided to the owner or manager of the business or to the person responsible for training operators. ***Additional manuals are available from the Alto-Shaam Tech Team Service Department.***

3. Remove all protective plastic film, packaging materials, and accessories from the appliance before connecting electrical power. Store any accessories in a convenient place for future use.

SAFETY PROCEDURES AND PRECAUTIONS

Knowledge of proper procedures is essential to the safe operation of electrically and/or gas energized equipment. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following signal words and symbols may be used throughout this manual.

DANGER

Used to indicate the presence of a hazard that WILL cause severe personal injury, death, or substantial property damage if the warning included with this symbol is ignored.

WARNING

Used to indicate the presence of a hazard that CAN cause personal injury, possible death, or major property damage if the warning included with this symbol is ignored.

CAUTION

Used to indicate the presence of a hazard that can or will cause minor or moderate personal injury or property damage if the warning included with this symbol is ignored.

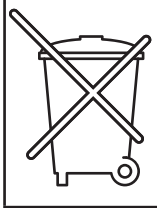
CAUTION

Used to indicate the presence of a hazard that can or will cause minor personal injury, property damage, or a potential unsafe practice if the warning included with this symbol is ignored.

NOTE: Used to notify personnel of installation, operation, or maintenance information that is important but not hazard related.

1. This appliance is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized or recommended.
2. This appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
3. Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified technical personnel.
4. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the item is sold or moved to another location.

NOTE



For equipment delivered for use in any location regulated by the following directive:

DO NOT DISPOSE OF ELECTRICAL OR ELECTRONIC EQUIPMENT WITH OTHER MUNICIPAL WASTE.

DANGER

IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH, OR CAUSE PROPERTY DAMAGE.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

CAUTION

DO NOT LIFT OR MOVE THE OVEN BY USING THE DOORS OR THE DOOR HANDLES.

CAUTION

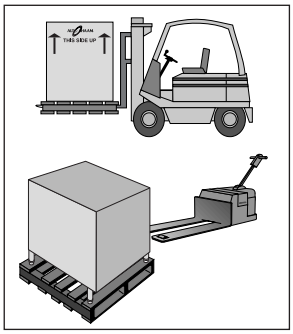
METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

DANGER

DO NOT store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

SITE INSTALLATION

The Alto-Shaam convection oven must be installed in a location that will permit the oven to function for its intended purpose and to allow adequate clearance for ventilation, proper cleaning, and maintenance.



1. Hood installation is recommended. (CHECK LOCAL CODES).
2. The oven must be installed on a stable and level surface.
3. **DO NOT** install this oven in any area where it may be affected by any adverse conditions such as steam, grease, dripping water, high temperatures, etc.
4. **DO NOT** store or use any flammable liquids or allow flammable vapors in the vicinity of this oven or any other appliance.
5. This appliance must be kept free and clear of any combustible materials.
6. This appliance must be kept free and clear of any obstructions blocking access for maintenance or service.

ASC-2E • WEIGHT	
NET: 203 lb (92 kg)	SHIP: 278 lb (126 kg)
CRATE DIMENSIONS:	35" L x 35" W x 41" H (889mm x 889mm x 1041mm)
MINIMUM ENTRY CLEARANCE	31-1/2" (800mm) UNCRATED
ASC-2E • DIMENSIONS: H x W x D	
EXTERIOR:	32-1/8" x 30" x 30-1/8" (815mm x 762mm x 815mm)
INTERIOR:	20" x 15" x 21" (508mm x 381mm x 533mm)

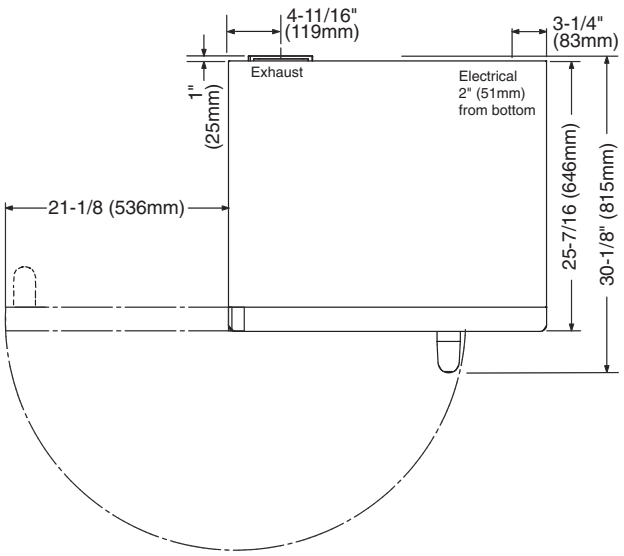
ASC-4E • WEIGHT	
NET: 490 lb (222 kg)	SHIP: 535 lb (243 kg)
CRATE DIMENSIONS:	53" L x 45" W x 49" H (1346mm x 1143mm x 1245mm)
MINIMUM ENTRY CLEARANCE	31-1/2" (800mm) UNCRATED
ASC-4E • DIMENSIONS: H x W x D	
EXTERIOR:	57-1/2" x 38" x 44-1/2" (1461mm x 965mm x 1130mm)
INTERIOR:	24" x 29-1/8" x 25" (610mm x 740mm x 635mm)

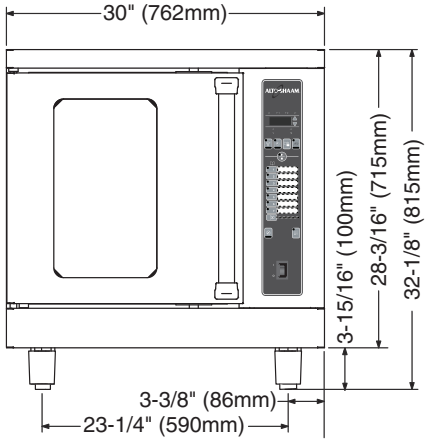
MINIMUM CLEARANCE REQUIREMENTS	
BACK:	0" (0mm)
LEFT SIDE:	2" (51mm)
RIGHT SIDE:	2" (51mm)
FROM GREASE PRODUCING EQUIPMENT:	6" (152mm)
RECOMMENDED SERVICE ACCESS:	20" (508mm) right side

INSTALLATION

EXTERIOR DIMENSIONS

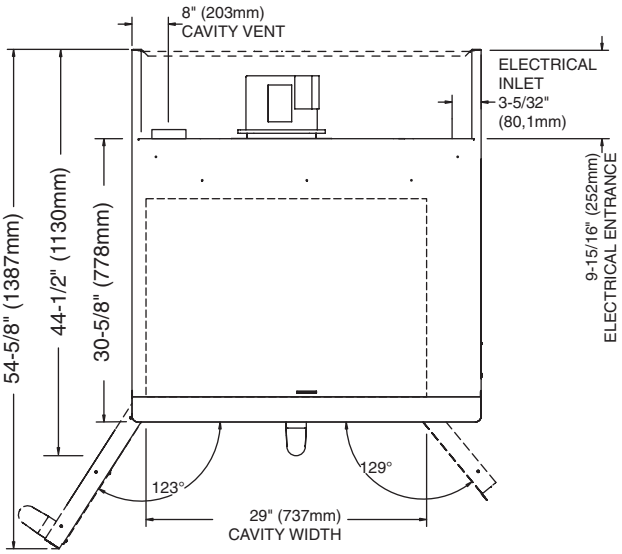
ASC-2E

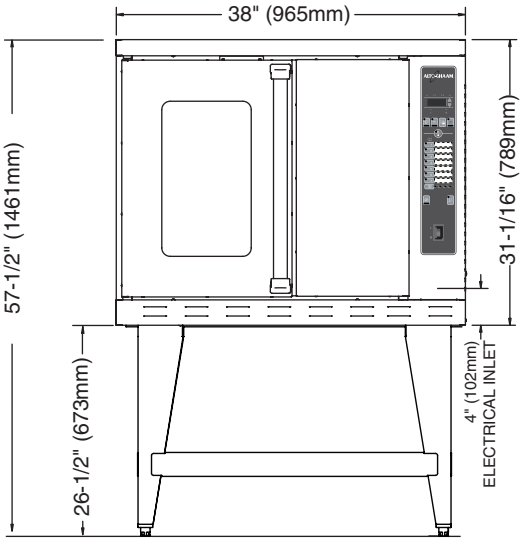




ASC-2E • PRODUCT\PAN CAPACITY
27 lb (12 kg) MAXIMUM — 17 qts (15 liters)
Nine (9): 18" x 13" x 1" half-size sheet pans
5 chrome plated wire shelves with 2 removable side racks and 9 shelf positions spaced at 1-5/8" (41mm)

ASC-4E





ASC-4E • PRODUCT\PAN CAPACITY
72 lb (33 kg) maximum • 45 qts (43 liters)
Twelve (12): 18" x 26" x 1" full-size sheet pans
6 chrome plated wire shelves with 2 removable side racks and 12 shelf positions spaced at 1-3/4" (43mm)

INSTALLATION REQUIREMENTS

The oven must be mounted on the factory equipped oven legs or on an optional oven stand. Installation on a solid or concrete base that in any way restricts air flow may void the warranty.

All clearances for a proper ventilation air supply must be maintained to minimize fire hazard. Do not locate the oven immediately adjacent to any other heat-generating appliance.

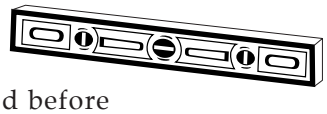
DANGER

IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH, OR CAUSE PROPERTY DAMAGE.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

A number of adjustments are associated with initial installation and start-up. Adjustments must be conducted by a qualified service technician. Installation and start-up adjustments are the responsibility of the dealer or user. These adjustments include but are not limited to thermostat calibration, door adjustment, and leveling. The Platinum series oven burners are factory-adjusted with fixed air openings and require no field adjustment.

LEVELING



The oven should be leveled before the gas supply is connected. Level the oven from side-to-side and front-to-back with the use of a spirit level. For ovens installed on a mobile stand, it is important that the floor surface be level due to the probability of frequent oven repositioning.

We recommend checking the level of the oven periodically to make certain the floor has not shifted nor the oven moved.

CAUTION

TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.

RESTRAINT REQUIREMENTS —MOBILE EQUIPMENT

WARNING

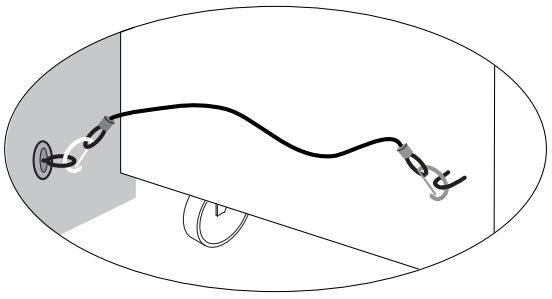
RISK OF ELECTRIC SHOCK.

Appliance must be secured to building structure.

Any appliance that is not furnished with a power supply cord but includes a set of casters must be provided with a tether. Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. The following requirements apply:

1. Casters must be a maximum height of 6" (152mm).
2. Two of the casters must of be the locking type.
3. Such mobile appliances or appliances on mobile stands must be installed with the use of a flexible connector secured to the building structure.

A mounting connector for a restraining device is located on the lower back flange of the appliance chassis or on an oven stand, approximately 18" (457mm) from the floor. A flexible connector is not supplied or available from the factory.



Where automatically operated appliances are vented through a ventilating hood or exhaust system equipped with a damper or with a power means of exhaust, provisions shall be made to allow the equipment to operate only when the damper is open to a position to properly vent the appliance and when the power means of exhaust is in operation. ACCORDANCE WITH NFPA 54 COMMONWEALTH OF MASSACHUSETTS ONLY.

INSTALLATION

ELECTRICAL CONNECTION

⚠ DANGER

ELECTRICAL CONNECTIONS MUST BE MADE BY A QUALIFIED SERVICE TECHNICIAN IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES.

The oven must be installed by a qualified electrician. This appliance must be branch circuit protected with proper ampacities, in accordance with the wiring diagram located in this manual or in the electrical compartment of the oven. The oven must be properly grounded in accordance with the National Electrical Code and applicable local codes.

DANGER

To avoid electrical shock, this appliance MUST be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/ NFPA No. 70. In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1 or local codes.

Plug the unit into a properly grounded receptacle ONLY, positioning the unit so that the plug is easily accessible in case of an emergency. Arcing will occur when connecting or disconnecting the unit unless all controls are in the "off" position.

Proper receptacle or outlet configuration or permanent wiring for this unit must be installed by a licensed electrician in accordance with applicable local electrical codes.

⚠ DANGER

ENSURE POWER SOURCE MATCHES VOLTAGE STAMPED ON APPLIANCE NAMEPLATE.

Wire size for the main incoming power to the unit must match the minimum size listed in the specifications applicable to the specific oven model. For supply connections, locate the wire size posted on the label located near the electric terminal block behind the service panel or elsewhere listed in this manual. Before attempting the electrical connection, the rating plate should be checked to ensure that the electrical characteristics of the appliance and the electrical supply characteristics agree.

Installation of the wiring must be made in accordance with U.L. 197 Commercial Electric Cooking Appliance Standards, Local and/or National Electrical Code, ANSI /NFPA 70-1990.

Service line entry is made through the rear of the oven for connection to the terminal block. Remove the service panel on the right side of the oven for access to the terminal block.

The oven is wired at the factory for either single phase or three phase service as indicated on the original purchase order. Input voltage and phase must match the voltage and phase of the oven. Visually check all electrical connections.

ELECTRICAL • ASC-2E

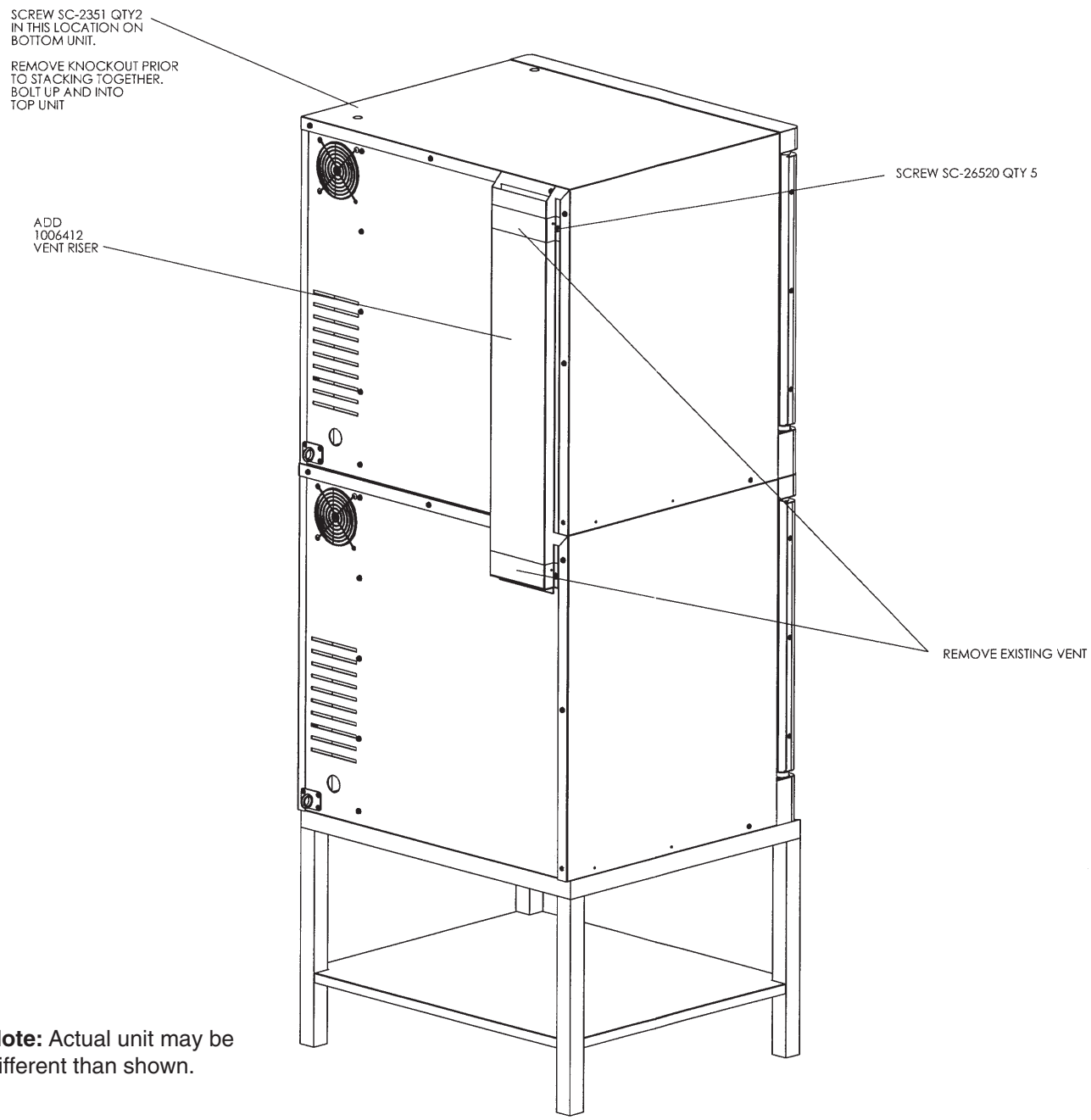
VOLTAGE	PHASE	CYCLE/HZ	AWG	AMPS	kW
208 (AGCY)	1	60	10	24.0	5.0
240 (AGCY)	1	60	10	20.8	5.0
208 (AGCY)	3	60	12	13.8	5.0
240 (AGCY)	3	60	12	12.0	5.0
NO CORD AND PLUG					

ELECTRICAL • ASC-4E

VOLTAGE	PHASE	CYCLE/HZ	AWG	AMPS	kW
208 (AGCY)	1	60	6	50.0	10.4
240 (AGCY)	1	60	6	43.3	10.4
208 (AGCY)	3	60	8	28.8	10.4
240 (AGCY)	3	60	8	25.0	10.4
480 (AGCY)	3	60	8	12.5	10.4
220 (AGCY)	1	50	6	40.0	8.7
NO CORD AND PLUG					

Wire diagrams are located in the inside access panel of the unit

STACKING & VENTING ASSEMBLY (2-ASC-2E/STK SHOWN)



Note: Actual unit may be different than shown.

CAUTION

TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.

Part numbers and drawings are subject to change without notice.

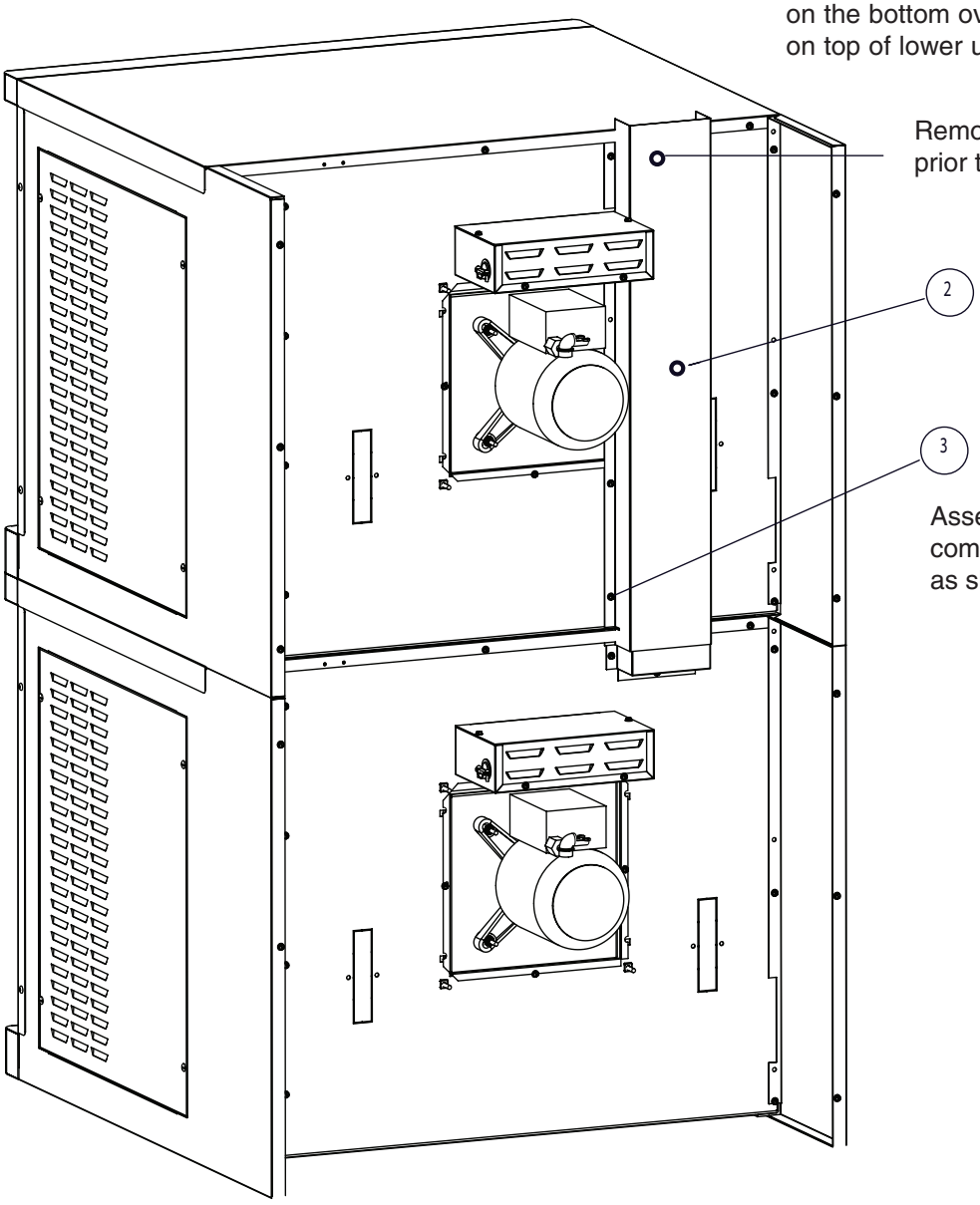
INSTALLATION

STACKING & VENTING ASSEMBLY (2-ASC-4E/STK 208/240V SHOWN)

ITEM	DESCRIPTION	PART NO.	QTY
2	RISER, FLUE ELECTRIC	1004984	1
3	SCREW, #10 SMS .5LG	SC-26520	5

Note: Actual unit may be different than shown.

After legs or casters have been installed on the bottom oven, place the upper oven on top of lower unit. Align.



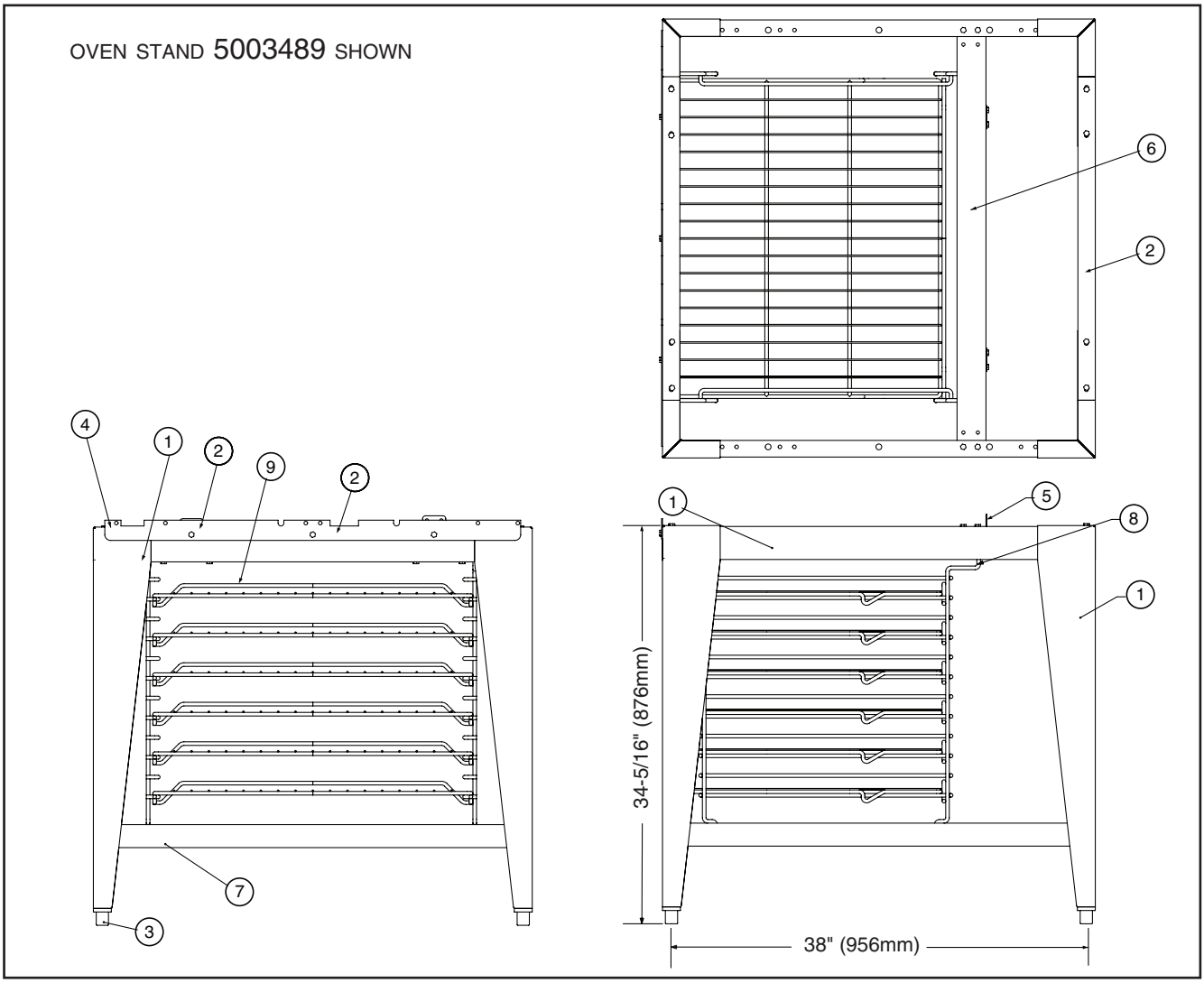
CAUTION

TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.

Part numbers and drawings are subject to change without notice.

OVEN STAND ASSEMBLY

OVEN STAND 5003489 SHOWN



ITEM	DESCRIPTION	PART NO.	QTY
1	LEG SUPPORT ASSEMBLY	5003488	2
2	CHANNEL, SUPPORT	1004459	2
3	LEG	LG-22185	4
	*CASTERS, RIGID	CS-25674	2
	*CASTERS, SWIVEL W/BRAKE	CS-25675	2
4	BRACKET, STAND	1004461	1
5	BRACKET, ATTACHMENT	1004369	2
6	CHANNEL, BACK	1004460	1
7	SHELF, STAND	1004466	1
8	RACK, OVEN SUPPORT	SR-26551	2
9	OVEN RACK	SH-26795	6
10	*SCREWS, 1/4-20 X 1/2 HEX HEAD	SC-22729	27
11	*NUT, 1/4-20 NYLON INSERT, 18-8 S/S	NU-23984	27
12	*LOCK WASHER, 1/4" STAINLESS STEEL	WS-2294	27

*NOT SHOWN

Part numbers and drawings are subject to change without notice.

OPERATING INSTRUCTIONS

USER SAFETY INFORMATION

START-UP OPERATION

CAUTION

METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

This appliance is intended for use in commercial establishments by qualified operating personnel where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.

BEFORE INITIAL USE:

Interior oven surfaces must be heated to remove surface oils and the accompanying odor produced during the first use of the oven.

1. Wipe all wire shelves, side racks and the full oven interior with a clean, damp cloth.

ASC-2E • PRODUCT\PAN CAPACITY
27 lb (12 kg) MAXIMUM — 17 qts (15 liters)
Nine (9): 18" x 13" x 1" half-size sheet pans
5 chrome plated wire shelves with 2 removable side racks and 9 shelf positions spaced at 1-5/8" (41mm)

OPTIONS & ACCESSORIES • ASC-2E	
☐ **CASTER KIT, 6" (152mm)**	5013871
LEG KIT, 4" (102mm)	
☐ Seismic feet	5004688
LEG KIT	
☐ with Bullet feet, 19-1/2" (495mm) HEIGHT	5005169
☐ with Seismic feet, 19-1/2" (495mm) HEIGHT	5005168
☐ with Casters, 23" (584mm) HEIGHT	5005181
☐ **SHELF, OVEN RACK**	SH-26894
STACKING HARDWARE SEE INDIVIDUAL STACKING COMBINATION SPECIFICATION SHEETS	
STAND, SINGLE OVEN	
☐ with Bullet feet, 26-1/2" (673mm) HEIGHT	5004672
☐ with Seismic feet, 26-1/2" (673mm) HEIGHT	5005172
☐ with Casters, 30" (762mm) HEIGHT	5004687

IN THE EVENT OF A POWER FAILURE:

- TURN ALL SWITCHES OFF.
- WAIT UNTIL POWER IS RESTORED BEFORE ATTEMPTING TO OPERATE THE OVEN.

NOTE: *If such an event has occurred, it is strongly recommended that you ensure the food in the oven is safe for consumption according to local health regulations.*

2. Close the oven doors, press the power switch to the ON position, and set the thermostat to 300°F (149°C).

3. Allow the oven to cycle for approximately 2 hours or until no odor is detected.

PREHEATING:

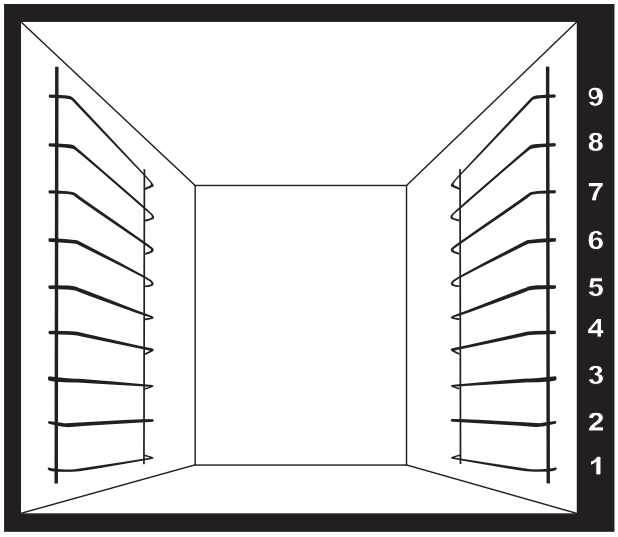
Always preheat a cold oven for a minimum of 20 minutes before cooking product. Follow the operating instructions indicated on the next few pages of this manual.

ASC-4E • PRODUCT\PAN CAPACITY
72 lb (33 kg) maximum • 45 qts (43 liters)
Twelve (12): 18" x 26" x 1" full-size sheet pans
6 chrome plated wire shelves with 2 removable side racks and 12 shelf positions spaced at 1-3/4" (43mm)

OPTIONS & ACCESSORIES • ASC-4E	
☐ **CASTER SET,** 6" (152mm) FOR MOBILE STACK APPLICATIONS	5003790
☐ **COOLING RACK** FOR OVEN STAND	5003791
LEG SET (4)	
☐ 6" (152mm) with Bullet Feet	5003794
☐ 6" (6152mm) with Seismic Feet	5003795
☐ 25" (635mm) with Seismic Feet	5003785
☐ **PANEL FOR BACK,** Stainless Steel	5005876
SHELF, OVEN RACK	
☐ INTERCHANGEABLE WITH COOLING RACK	SH-26795
STACKING HARDWARE SEE INDIVIDUAL STACKING COMBINATION SPECIFICATION SHEETS	
STAND, STAINLESS STEEL	
☐ Mobile, with Cooling Racks & Casters, 38" H (965mm)	5003786
☐ Stationary, with Cooling Racks & Bullet Feet	5003489
☐ Stationary, with Cooling Racks & Seismic Feet	5003787
34-1/4" (870mm) min. • 35-1/2" (902mm) max. H (FEET ARE ADJUSTABLE)	

PAN/SHELF POSITIONS FOR ASC-2E:

The oven includes 5 chrome plated wire shelves with two removable side racks and 9 shelf positions spaced at 1-5/8" (41mm).



1. POSITION **2 4 6 8** The best arrangement for broiling, baking cookies and for other baked goods under 2-1/2" (65mm) in height. This arrangement can also be used as the maximum capacity for reconstituting frozen entrées.

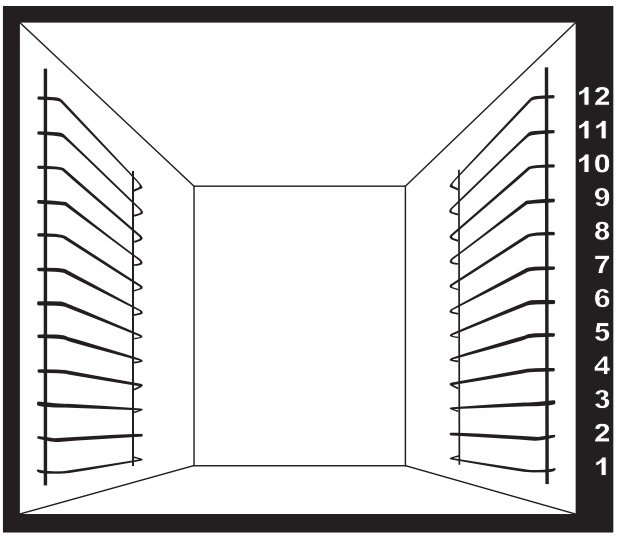
2. POSITION **1 4 7** General baking with the use of sheet pans for products under 3-1/2" (89mm) in height. Products include cakes, pies, muffins, or extended dishes in 12" x 20" x 2-1/2" deep pans (530mm x 325mm x 65mm GN 1/1).

3. POSITION **1 5** Ideal positions for baking bread, meringue, or extended dishes and roasts in pans not to exceed 5-1/2" (140mm) in height.

4. POSITION **1 6** Arrangement necessary for roasting whole turkey or roasts up to 7" (178mm) in height.

PAN/SHELF POSITIONS FOR ASC-4E:

The oven includes 6 chrome plated wire shelves with two removable side racks and 12 shelf positions spaced at 1-3/4" (43mm).



1. POSITION **2 4 6 8 12** The best arrangement for broiling, baking cookies and for other baked goods under 2-1/2" (65mm) in height. This arrangement can also be used as the maximum capacity for reconstituting frozen entrées.

2. POSITION **1 4 7 10** General baking with the use of sheet pans for products under 3-1/2" (89mm) in height. Products include cakes, pies, muffins, or extended dishes in 12" x 20" x 2-1/2" deep pans (530mm x 325mm x 65mm GN 1/1).

3. POSITION **1 5 9** Ideal positions for baking bread, meringue, or extended dishes and roasts in pans not to exceed 5-1/2" (140mm) in height.

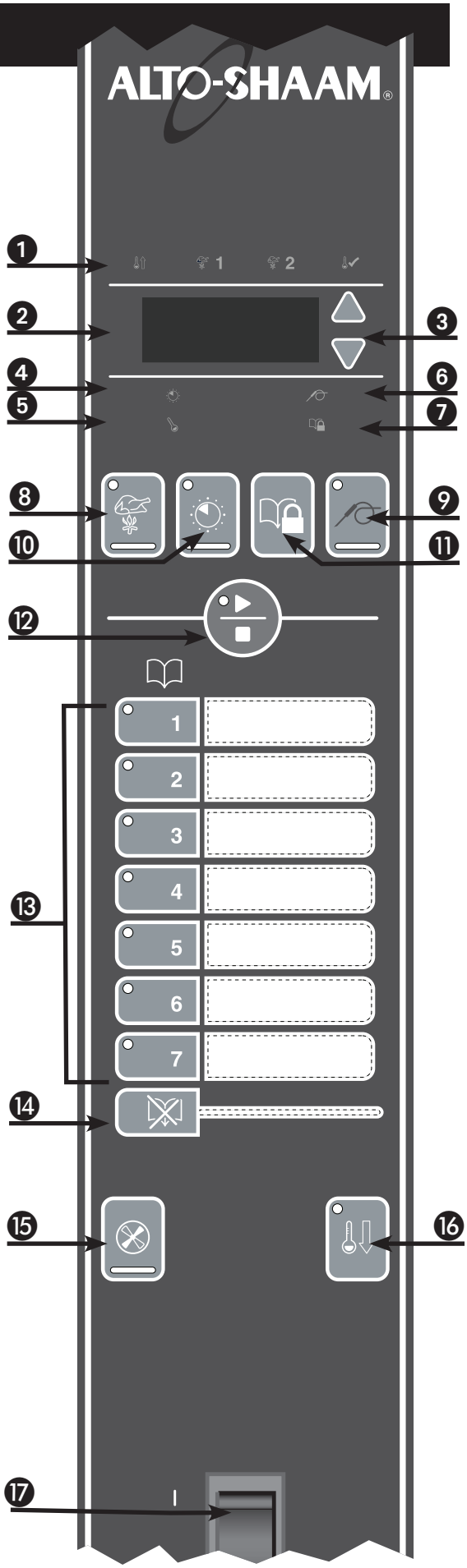
4. POSITION **1 6** Arrangement necessary for roasting whole turkey or roasts up to 7" (178mm) in height.

CAUTION

METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

CONTROL IDENTIFICATION

1. PREHEAT INDICATOR
2. LED DISPLAY
3. UP/DOWN ARROWS
4. COOK INDICATOR
5. TEMPERATURE INDICATOR
6. PROBE INDICATOR
7. PRESET INDICATOR
8. COOK KEY
9. PROBE KEY
10. TIME KEY
11. PRESET LOCK KEY
12. START/STOP KEY
13. PRESET KEYS 1-7
14. CANCEL KEY
15. FAN SPEED KEY
16. COOL DOWN KEY
17. MAIN POWER SWITCH



ELECTRONIC CONTROL OPERATION

A. PRESS MAIN POWER ⑰ "ON."

- The display ❷ will alternate between last Cook Set Temperature and actual Cavity Temperature.
- The oven will preheat to previous Cook temperature, and the **PREHEAT** Indicator ❶ will illuminate.

To terminate procedure, press **START/STOP** key ⑫ twice.

B. IF THE PREVIOUS COOK CYCLE IS ACCEPTABLE, PROCEED TO STEP C.

1. TO COOK BY TIME:

- Press **COOK** ❽
- Press lit **TIME** Key ❿
- Confirm fan speed.
- Adjust the cooking temperature with the UP or DOWN arrow keys ❸.

Note: The **TIME** Indicator ❹ will remain lit.

2. TO COOK BY PROBE (OPTIONAL):

- Press **COOK** ❽
- Press lit **PROBE** Key ❾
- Confirm fan speed.
- Adjust the cooking temperature with the UP or DOWN arrow keys ❸.

Note: The **PROBE** Indicator ❻ will remain lit.

Note: If more than 5 seconds elapse before a decision is made, the mode button must be pushed again to continue.

C. WHEN THE COOK PREHEAT TEMP. HAS BEEN REACHED:

- The **START** Key ⑫ and **READY** Indicator ❶ will flash.
- The control will produce an audible beep every 30 seconds.

1. LOAD PRODUCT IN A TIMELY MANNER.

a. TO COOK BY TIME:

- The display ❷ will alternate between cook cycle temperature and remaining cooking time when cooking by **TIME.**

b. TO COOK BY PROBE (OPTIONAL):

- If cooking by probe, remove probe from its bracket, wipe the probe tip with a disposable alcohol pad and properly insert probe into product.
- The display will alternate between set cooking temperature, probe temperature, and elapsed time when cooking by **PROBE**.

2. CLOSE THE OVEN DOOR -- PRESS START KEY.

3. AFTER COOK CYCLE IS COMPLETE AND PRODUCT IS READY:

- The display will indicate "DONE".
- The **START/READY** indicates will flash, and the oven will beep every 30 seconds.

4. REMOVE PRODUCT PROMPTLY TO AVOID OVERCOOKING.

To terminate procedure, press **START/STOP** key twice.

D. COOLING THE OVEN:

- Open door.
- Press **COOL DOWN** key ⑯.

1. COOL CONTINUOUSLY

- Fan will run continuously.
- Shut off POWER to terminate.

2. SET COOL DOWN TEMPERATURE

- Set desired cool down temperature with **UP/DOWN** arrows ❸. *The cool down temperature ranges from 80° to 450°F.*
- Fan will run continuously.
- When the desired cool down temperature is reached, "COOL/STOP" will light on the LED, and the oven will beep every 30 seconds.

Note: If more than 4 seconds elapse before a decision is made, the mode button must be pushed again to continue.

NOTE: START/STOP key will stop fan, and terminate the COOL/DOWN feature.

E. AT THE END OF THE DAY, SHUT OFF OVEN POWER BEFORE LEAVING THE PREMISES.

OPERATING INSTRUCTIONS

MENU PRESETS

PROGRAMMING

This Alto-Shaam electronic convection oven allows the operator to program up to seven cooking procedures. Each cooking program entered can be preset in any program function to cook by time (or probe, if a probe is included on the oven). Cooking programs are stored and recalled with ⓭, the **PRESET** keys labeled "**1** through **7**."

Press MAIN POWER ⓱ "ON."

- The display ❷ will alternate between last Cook Set Temperature and actual cavity temperature. The oven will begin preheating and the Preheat Indicator ❶ will illuminate. The fan will operate at high speed **"FnHi"**

FOLLOW INSTRUCTIONS LISTED ON THE PREVIOUS PAGES OF THIS MANUAL.

Press and hold selected PRESET key 1 through 7 for 4 seconds

- A beep sounds.
- The numbered key program indicator light will illuminate.

The programmed procedure is now stored in memory for the specific number key selected. To lock **PRESET** keys **1** through **7**, press **PRESET** key ⓫ simultaneously with up arrow ❸. To unlock, press the preset key ⓫ simultaneously with the down arrow ❸.

At this point, press **START/STOP** ⓬ twice. This will protect the **PRESET** in case of a power outage.

IMPORTANT

After programming a specific product into memory on the preset key, it is very important to make a written permanent record of the product and the program letter assigned.

ERASING A PROGRAM

To erase a program, the oven must be in the PREHEAT mode. The oven cannot be running a PRESET Menu program.

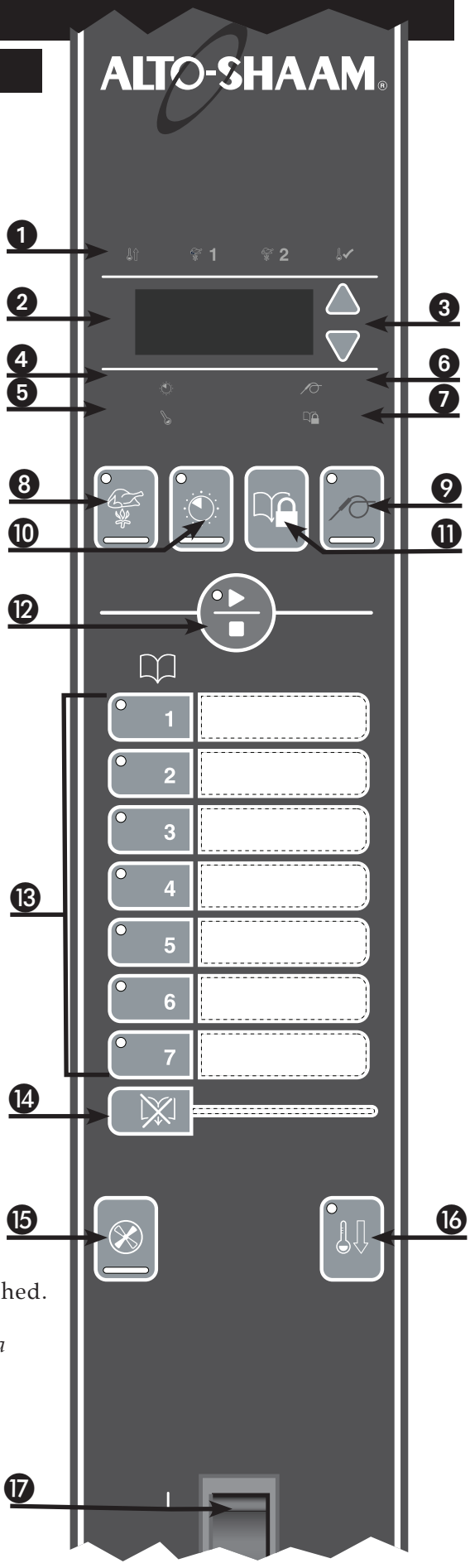
- When the oven is in the PREHEAT mode, press and hold both the **CANCEL** key ⓮ and the appropriate number **PRESET** key ⓭ to be erased. Hold both keys until the oven double beeps, and the program's indicator light goes out. This indicates the program has been erased.

COOK -- USING PRESET MENU KEYS

- Press desired **PRESET** key (1 thru 7) ⓭. Preheat will begin.
- The oven will beep when the preheat temperature has been reached.
- Load food inside the oven.
  If cooking by probe, remove probe from its bracket, wipe the tip with a disposable alcohol pad and insert probe properly into product.
- Close the oven door.
- Press **START**.

NOTE:

- If the oven temperature is higher than the **PRESET** program, utilize the **COOL DOWN** mode.
- Time and Temperature have been programmed in the PRESET key -- they cannot be adjusted during the PRESET cooking cycle.



Stop an Operation:

Press **Start/stop** ⓬ Key. The oven will remain in a power-on state, and the operation will be cancelled. Press **Cook** ❽ to set procedure again.

Adding product after Start:

If the door is opened during cook cycle, the heater, fan, and timer will disengage. "Door" will illuminate in the display. The timer will be held to the last value at the point of interruption. The oven will continue operation from the point of interruption when the door is closed.

Arrow Keys:

Cook, Hold and Probe Temperature set points can be adjusted by 1° when pressing the **ARROW** Keys. To adjust in steps of 10°, press and hold the **TEMPERATURE** Key and **ARROW** Key at the same time.

The **Time** setting is adjusted in increments of 1 minute by pressing the **ARROW** Keys. To make adjustment in steps of 10 minutes, press and hold the **TIME** Key and **ARROW** Key at the same time.

To run oven continuously at a SET temperature:

Set **Cook** temperature**,** set **TIME** to "**--:--** ". The oven will run continuously at that SET temperature. The display will alternate between the set-temperature and "--:--", signifying continuous cooking. The operator is then responsible for timing the cooking loads. To disengage, press **Start/Stop**.

Fan Speed:

The fan speed can be adjusted to HIGH or LOW during any **preheat** or **cook** cycle (including **presets**). When high speed is selected, the underscore bar below the **Fan Speed** key will illuminate. The display will indicate **"FnHi"**. When low speed is selected, the underscore bar below the **Fan Speed** key will not be illuminated. The display will indicate **"FnLo".**

NOTE: The time and temperature can be adjusted during the cooking mode, (unless a preset key program is used).

Probe Usage:

When the oven probe remains inserted in the probe bracket, the LED temperature display will indicate the ambient air temperature inside the oven. To use the probe for cooking remove it from the bracket and wipe the full length of the metal probe with a disposable alcohol pad to clean and sanitize before using.

Only the tip of the probe senses the internal product temperature; therefore, it is important the tip be placed correctly in the product for internal temperature accuracy. Push the probe tip halfway into the product, positioning the tip at the center of the food mass. When inserting the probe into solid foods such as meat roast or poultry breasts, push the probe in from a straight downward position or in from the side to the center position. If placing into a semi-liquid or liquid product, the probe cable must be secured to keep the probe positioned properly. Do not let the probe tip touch the edges, bottom or side of a container. Tape the probe cable to the lip or edge of the container.

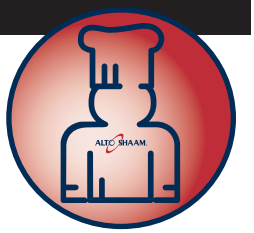
NOTE: When cooking by probe, insert the probe into the raw product after the oven has been preheated.

WAIT ONE FULL MINUTE to allow the probe temperature to decrease to the internal temperature of the product. Press the start button to begin the cooking process after this probe temperature adjustment period. A false probe reading of the internal product temperature will cause the oven to default to a holding temperature.

Probe Calibration:

1. To verify product probe calibration, place the probe in a warm glass of water along with a quality independent digital thermometer and press the probe key for two (2) seconds to display the probes actual temperature. Compare readings.
2. If calibration is required, press the probe key for eight (8) seconds until the unit beeps twice and the probe offset is displayed. Adjust the probe offset to match the difference between the independent probe temperature and the control probe temperature by pressing the up or down arrows to increase or decrease the offset.
3. Repeat steps 1 and 2 to verify the probe calibration as necessary.

CHEF OPERATING TIPS



The Alto-Shaam convection oven will provide the best results and longest possible service with the utilization of the following suggestions and guidelines.

NOTE: Moisture will escape around the doors when baking products with a heavy moisture content such as chicken, potatoes, etc. This is a normal operating condition.

1. Thoroughly preheat the oven for approximately 20 minutes before use.
2. As a general rule, the cooking temperature can be set lower than the temperature used in a conventional oven. Cooking time may also be shorter. It is suggested the first batch of each product prepared be monitored closely to check for variances.
3. Maintain a record of the temperatures, times, and load capacities established for products cooked on a regular basis since they will be the same or similar for succeeding loads.
4. When practical, start cooking the lowest temperature products first and gradually work up to products with a higher cooking temperature.
5. If the cooking temperature setting for the previous product is more than 10°F (5°C to 6°C) higher than the temperature needed for the next load, use the FAN COOL-DOWN feature to decrease the oven temperature before setting the oven to a lower temperature.
6. Work as quickly as possible when loading the oven to prevent heat loss.
7. When the audible signal indicates the time has expired, remove the food product from the oven as quickly as possible to avoid over cooking.
8. Pans should be centered between side racks and each shelf should be loaded evenly to allow proper air circulation within the oven compartment.
9. To assure even cooking when baking, weigh or measure the product in each pan.
10. **ASC-2E:** When cooking five pans of product, start from the bottom of the oven and use side rack positions 1, 3, 5, 7, and 9.

    ASC-4E: When cooking six pans of product, start from the bottom of the oven and use side rack positions 2, 4, 6, 8, 10, and 12.
11. Do not overload the oven. Refer to product/pan capacties indicated in this manual.
12. To obtain an evenly baked product, muffin pans should be placed in the oven with the short side of each pan facing the front of the oven.
13. When rethermalizing frozen casseroles, preheat the oven 100°F (38°C) over the suggested temperature to compensate for the introduction of a large quantity of frozen product into the oven compartment. Reset the thermostat to the correct cooking temperature after the oven is loaded.
14. Use a pan extender or two inch (51mm) deep, 18" x 26" pans for batter-type products that weigh more than 8 pounds (3 to 4 kg), i.e.; pineapple upside-down cake.
15. To avoid obstructing airflow that would result in uneven cooking, never place anything directly on the bottom of the oven cavity.

Cooking Guidelines

Food	Temperature		Time (Minutes)	Food	Temperature		Time (Minutes)
Cakes, Sheet	325°F	163°C	25	Macaroni & Cheese (frozen, full oven)	350°F	177°C	90
Chicken pieces (30 breasts & thighs, 25 legs & wings)	400°F	204°C	25	Macaroni & Cheese (refrigerated)	350°F	177°C	30
Chicken halves	400°F	204°C	40	Muffins	325°F	163°C	13-15
Beef patties	400°F	204°C	8	Pies, Frozen	325°F	163°C	40
Bacon	350°F	177°C	16	Pizzas, Individual	325°F	163°C	15
Fish, frozen (5 oz.)	350°F	177°C	15	Potatoes, Baked	350°F	177°C	50
Macaroni & Cheese (frozen, 1 pan)	350°F	177°C	50	Sandwiches, Grilled Cheese	400°F	204°C	4-6
				Tater tots	450°F	232°C	10

AT THE END OF THE DAY, UTILIZE THE COOL-DOWN MODE AND OPEN THE OVEN DOORS.

Do not place anything directly on the bottom of the oven cavity.

CLEANING AND PREVENTIVE MAINTENANCE

PROTECTING STAINLESS STEEL SURFACES

It is important to guard against corrosion in the care of stainless steel surfaces. Harsh, corrosive, or inappropriate chemicals can completely destroy the protective surface layer of stainless steel. Abrasive pads, steel wool, or metal implements will abrade surfaces causing damage to this protective coating and will eventually result in areas of corrosion. Even water, particularly hard water that contains high to moderate concentrations of chloride, will cause oxidation and pitting that result in rust and corrosion. In addition, many acidic foods spilled and left to remain on metal surfaces are contributing factors that will corrode surfaces.

Proper cleaning agents, materials, and methods are vital to maintaining the appearance and life of this appliance. Spilled foods should be removed and the area wiped as soon as possible but at the very least, a minimum of once a day. Always thoroughly rinse surfaces after using a cleaning agent and wipe standing water as quickly as possible after rinsing.

CLEANING AGENTS

Use non-abrasive cleaning products designed for use on stainless steel surfaces. Cleaning agents must be chloride-free compounds and must not contain quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel surfaces. Always use the proper cleaning agent at the manufacturer's recommended strength. Contact your local cleaning supplier for product recommendations.

CLEANING MATERIALS

The cleaning function can usually be accomplished with the proper cleaning agent and a soft, clean cloth. When more aggressive methods must be employed, use a non-abrasive scouring pad on difficult areas and make certain to scrub with the visible grain of surface metal to avoid surface scratches. Never use wire brushes, metal scouring pads, or scrapers to remove food residue.

⚠ CAUTION

TO PROTECT STAINLESS STEEL SURFACES, COMPLETELY AVOID THE USE OF ABRASIVE CLEANING COMPOUNDS, CHLORIDE BASED CLEANERS, OR CLEANERS CONTAINING QUATERNARY SALTS. NEVER USE HYDROCHLORIC ACID (MURIATIC ACID) ON STAINLESS STEEL. NEVER USE WIRE BRUSHES, METAL SCOURING PADS OR SCRAPERS.

CARE AND CLEANING

The oven is fabricated with an easy to clean porcelain enamel interior or an optional stainless steel interior.

NOTE: Always allow the oven to cool before cleaning. If the oven is hot, allow the interior surfaces to become cool to the touch by opening the oven doors and engaging the cool-down function.

CLEAN THE OVEN ON A DAILY BASIS

1. After the oven has cooled, remove all detachable items such as wire shelves, side racks, and drip pan. Clean these items separately.
2. Remove any food scraps from shelves, shelf supports, and blower fan wheel. Convection baffle openings must be kept clear of food scraps and grease.
3. Wipe the interior metal surfaces of the oven with a paper towel to remove any remaining food debris.
4. Clean interior with a damp cloth or sponge and any good commercial detergent at the recommended strength.
5. For baked-on food deposits, use a non-caustic and non-toxic commercial oven cleaner appropriate for the interior oven surface of your oven. Follow the product manufacturer's instructions carefully for the use of this product. Any commercial oven cleaner must be approved for use on food contact areas. Remove soil with the use of a plastic scouring pad.
6. Wipe door gaskets thoroughly since these areas harbor food debris and grease.
7. Rinse surfaces by wiping with a clean cloth or sponge and clean warm water.

8. Remove excess water with a sponge and wipe dry with a clean cloth or air dry. Leave doors open until interior is completely dry. Replace side racks and shelves.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for food service equipment.

DO NOT USE ABRASIVE CLEANING COMPOUNDS.

Completely avoid the use of abrasive cleaning compounds, chloride-based cleaners, or cleaners containing quaternary salts. To protect metal finish on stainless steel, never use hydrochloric acid (muriatic acid).

⚠ DANGER

DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

EXTERIOR

To help maintain the protective film coating on polished stainless steel, clean the exterior of the cabinet with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a clean cloth and wipe with the grain of the stainless steel.

Wipe control panel, door vents and door handles, thoroughly since these areas harbor food debris.

Clean exterior glass surfaces with a commercial window cleaner.

DO NOT USE ABRASIVE CLEANING COMPOUNDS

MOTOR CARE

The convection oven motor contains self-lubricating, sealed ball bearings and is generally maintenance-free. During operation, the interior of the motor is cooled by air flowing into the rear of the motor case. This is a general operating feature when proper clearances have been allowed.

AT THE END OF THE DAY, UTILIZE THE COOL-DOWN MODE AND OPEN THE OVEN DOORS.

DANGER

AT NO TIME SHOULD THE INTERIOR OR EXTERIOR BE STEAM CLEANED, HOSED DOWN, OR FLOODED WITH WATER OR LIQUID SOLUTION OF ANY KIND. DO NOT USE WATER JET TO CLEAN.

SEVERE DAMAGE OR ELECTRICAL HAZARD COULD RESULT.

WARRANTY BECOMES VOID IF APPLIANCE IS FLOODED

TROUBLESHOOTING GUIDE

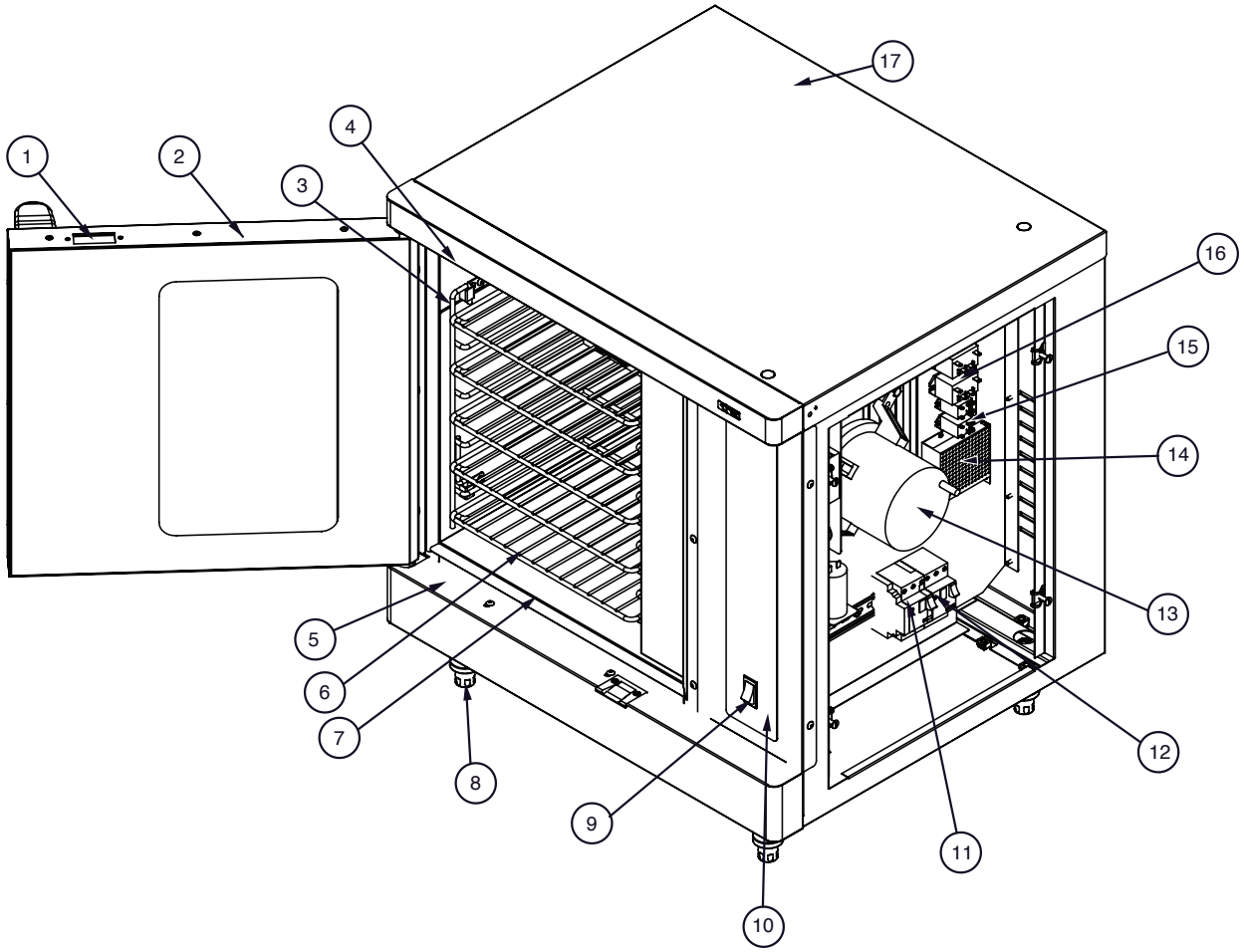
Error Code	Description	Possible Cause
E-10	**Cavity air sensor shorted**	Cavity air sensor reading < 5°F. Verify sensor integrity. See sensor test instructions below.
E-11	**Cavity air sensor open**	Cavity air sensor reading > 517°F. Verify sensor integrity. See sensor test instructions below.
E-20	**Product probe is shorted** *Oven will cook in time only*	Product probe reading < 5°F. Verify sensor integrity. See sensor test instructions below.
E-21	**Product probe is open** *Oven will cook in time only*	Product Probe reading > 517°F. Verify sensor integrity. See sensor test instructions below.
E-30	**Under temperature**	Unit has not reached set-point for more than 90 minutes. **Note:** 30 minutes for Rotisseries and Convection Ovens
E-31	**Over temperature**	Unit has been higher than 25°F above the maximum cavity set-point for more than 2 minutes. **Note:** Holding Cabinets with this error code are more than 145°F higher than the maximum set-point.
E-50	**Temp. measurement error**	Contact factory.
E-51	**Temp. measurement error**	Contact factory.
E-60	**Real time clock error**	Data set to factory default. Ensure that date and time are correct if applicable.
E-61	**Real time clock error**	Contact factory.
E-70	**Configuration connector error (DIP switch)**	Refer to wiring diagram for the particular model and ensure dip switches on the control match the settings called out on the WD. If the dip switch settings are correct according to the print replace the control.
E-78	**Voltage low**	Voltage below 90 VAC on a 125 VAC unit, or below 190 VAC on a 208-240 VAC unit. Correct voltage.
E-79	**Voltage high**	Voltage over 135 VAC on a 125 VAC unit, or over 250 VAC on a 208-240 VAC unit. Correct voltage.
E-80	**EEPROM Error**	Ensure that all temperatures and times are properly set. Contact factory if problem persists.
E-81	**EEPROM Error**	Contact factory.
E-82	**EEPROM Error**	Contact factory.
E-83	**EEPROM Error**	Contact factory.
E-85	**EEPROM Error**	All timers, if previously on, are now off. Possible bad EEPROM.
E-86	**EEPROM Error**	Stored HACCP memory corrupted. HACCP Address reset to 1. Possible bad EEPROM. Contact factory if problem persists.
E-87	**EEPROM Error**	Stored offsets corrupted. Offsets reset to 0. Control may need a recalibration. Possible bad EEPROM. Contact factory if problem persists.
E-88	**EEPROM Error**	All timer set-points are reset to 1 minute. Timers, if previously on, are now off. Possible bad EEPROM.
E-90	**Button stuck**	A button has been held down for >60 seconds. Adjust control. Error will reset when the problem has been resolved.
E-dS	**Datakey error**	Datakey digital signature incompatible. Cycle power, and install compatible Datakey if error persists.
E-dT	**Datakey error**	Datakey incompatible with control. Install compatible Datakey.
E-dU	**Datakey unplugged**	Install Datakey and cycle power to control to clear error.
Note: *If in doubt, always cycle the power to the control and contact factory if the problem persists.*		

To test probe and air sensor:

Test probe and air sensor by placing sensor in ice water bath and using an ohmmeter set on the ohm scale. The reading should be 100 ohms resistance. If it is more than 2 ohms higher or lower, sensor needs to be replaced.

SERVICE

FULL ASSEMBLY - ASC-2E

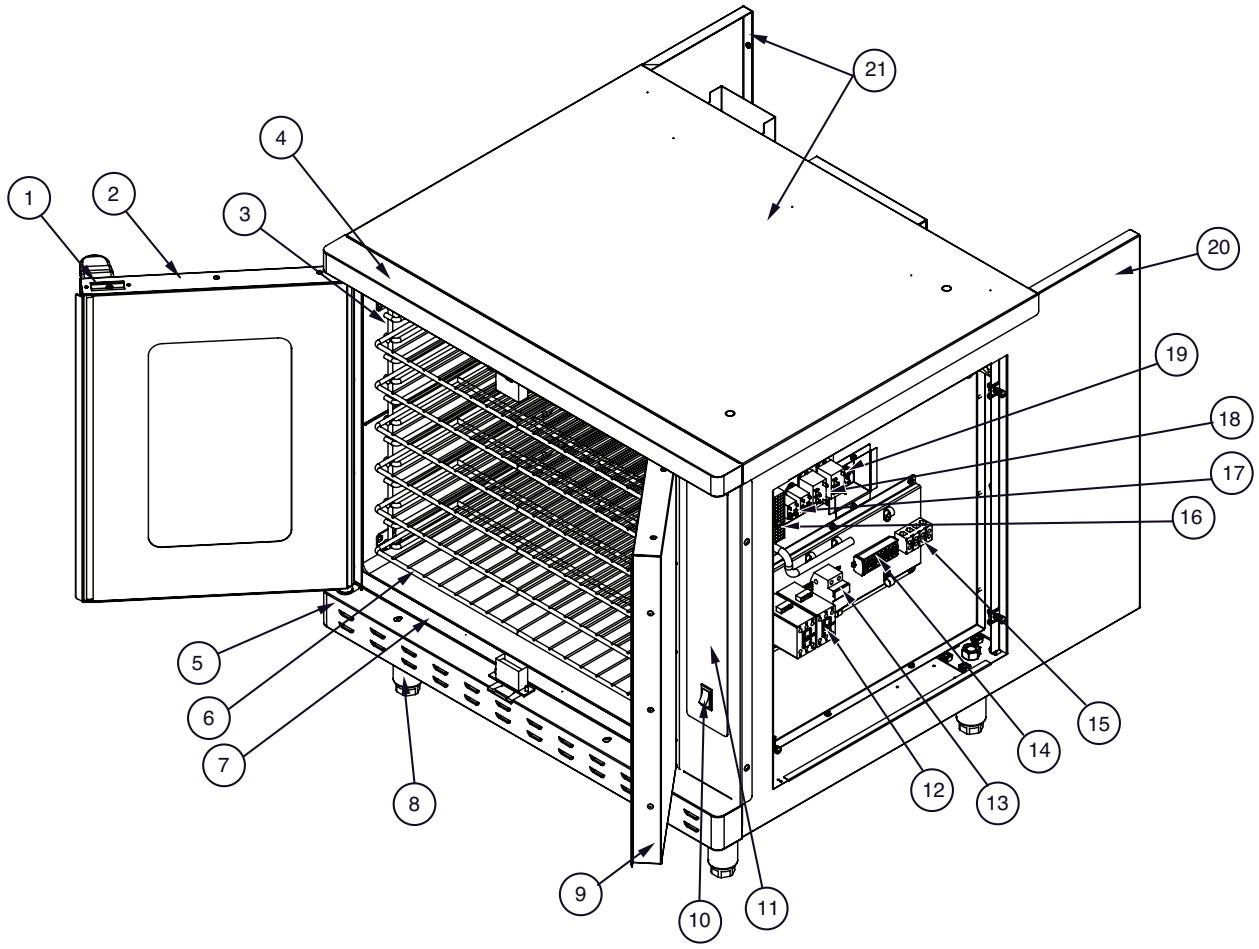


ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	LATCH	LT-26976	2	16	MOTOR RELAY	RL-33558	2
2	DOOR ASSEMBLY	DR-27848	1	17	PANEL, TOP AND SIDE	1005455	1
3	SIDE RACK	SR-26893	2	18*	WHEEL, BLOWER	WH-26895	1
4	COVER, TOP HINGE	1005459	1	19*	HEAT ELEMENTS, OUTER 208V	EL-34211	1
5	COVER, BOTTOM HINGE	1005458	1		240V	EL-34210	1
6	OVEN RACK	SH-26894	5	20*	HEAT ELEMENTS, INNER 208V	EL-34212	1
7	GASKET TOP/BOTTOM	1005316	2		240V	EL-34209	1
	SIDE	1005311	2	21*	BLOCK, TERMINAL	BK-3597	1
8	FEET	SEE PG 10	4	22*	BLOCK, MODULAR	BK-25567	1
9	SWITCH, DOOR, ROLLER	SW-34164	1	23*	CONTACTOR	CN-3731	1
10	PANEL OVERLAY	PE-26977	1	24*	FUSE HOLDER	FU-34771	1
11	SWITCH, MOTOR PROTECT	SW-33500	1		FUSE, 15 AMP	FU-34772	2
12	SWITCH, MOTOR PROTECT	SW-33378	1	25*	FAN, BOX 70CFM, 230V, 50-60Hz	FA-3568	1
13	MOTOR	MO-34208	1	26*	GUARD, FAN	GU-2396	1
14	POWER SUPPLY	BA-33554	1	27*	SWITCH, HIGH LIMIT	SW-34112	1
15	RELAY	RL-33930	2				

*Not Shown

Part numbers and drawings are subject to change without notice.

FULL ASSEMBLY - ASC-4E



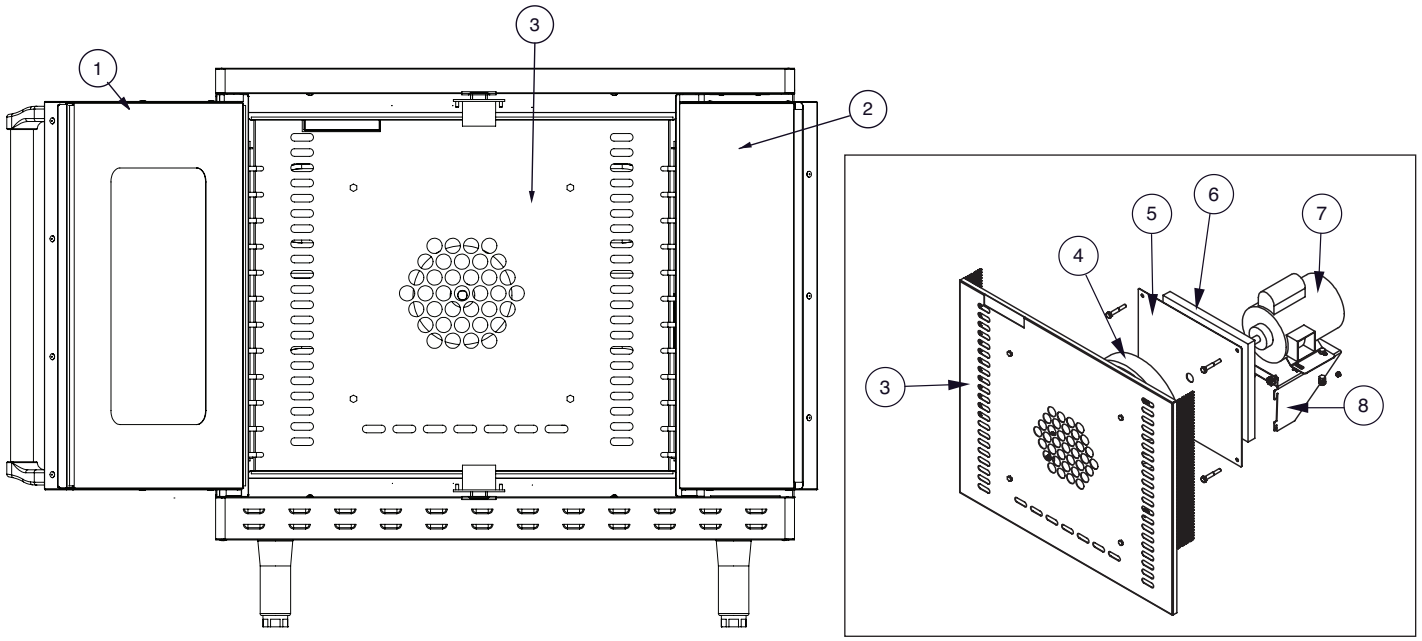
ITEM	DESCRIPTION	PART NO.	QTY	ITEM	DESCRIPTION	PART NO.	QTY
1	LATCH	LT-26976	2	14	MODULAR BLOCK	BK-34684	1
2	DOOR ASSEMBLY, LH	DR-27850	1	15	TERMINAL BLOCK	BK-3597	1
3	SIDE RACK	SR-26396	2	16	POWER SUPPLY	BA-33554	1
4	COVER, BOTTOM HINGE	1006678	1	17	RELAY	RL-33930	2
5	COVER, TOP HINGE	1006679	1	18	MOTOR RELAY	RL-33558	2
6	OVEN RACK	SH-26795	6	19	HIGH LIMIT	SW-34150	1
7	GASKET TOP/BOTTOM	1006606	2	20	PANEL OUTER, RH	1006671	1
	SIDE	1000605	2	21	PANEL OUTER, TOP AND LH	1006623	1
8	FEET	SEE PG 10	4	22*	PANEL, LOUVERED ACCESS	1006672	1
9	DOOR ASSEMBLY, RH	DR-27849	1	23*	CORD	CD-34094	1
10	SWITCH, FAN, HI/LO	SW-34101	1	24*	FAN, BOX 34CFM, 230V, 50-60Hz	FA-3974	1
11	PANEL OVERLAY	PE-26977	1	25*	BUZZER	BZ-34113	1
12	CONTACTOR	CN-3731	2	26*	RECEPTICAL, LAMP	RP-3986	1
13	FUSE HOLDER	FU-34771	1	27*	BULB, 15W	LP-3686	1
	FUSE, 15 AMP	FU-34772*	2				

*Not Shown

Part numbers and drawings are subject to change without notice.

SERVICE

INTERIOR OVEN COMPARTMENT - ASC-4E



ITEM	DESCRIPTION		PART NO.	QTY
1	DOOR ASSEMBLY, LH		DR-27850	1
2	DOOR ASSEMBLY, RH		DR-27849	1
3	BAFFLE, REAR		5005222	1
4	BLOWER WHEEL		WH-26405	1
5	MOTOR CAVITY PLATE		1011111	1
6	INSULATION		IN-27866	1
7	CONVECTION MOTOR	115V	MO-34790	1
	CONVECTION MOTOR ASSEMBLY	125V	5010354**	1
8	MOTOR MOUNT		1009810	1
9*	HEAT ELEMENTS, FRONT	208V	EL-34126	1
		240, 220V	EL-34129	1
		480V	EL-34347	1
	HEAT ELEMENTS, MIDDLE	208V	EL-34127	1
		240, 220V	EL-34146	1
		480V	EL-34346	1
	HEAT ELEMENTS, MIDDLE	208V	EL-34128	1
		240, 220V	EL-34125	1
		480V	EL-34345	1

*Not Shown ** Prior to serial number 870689

⚠ DANGER

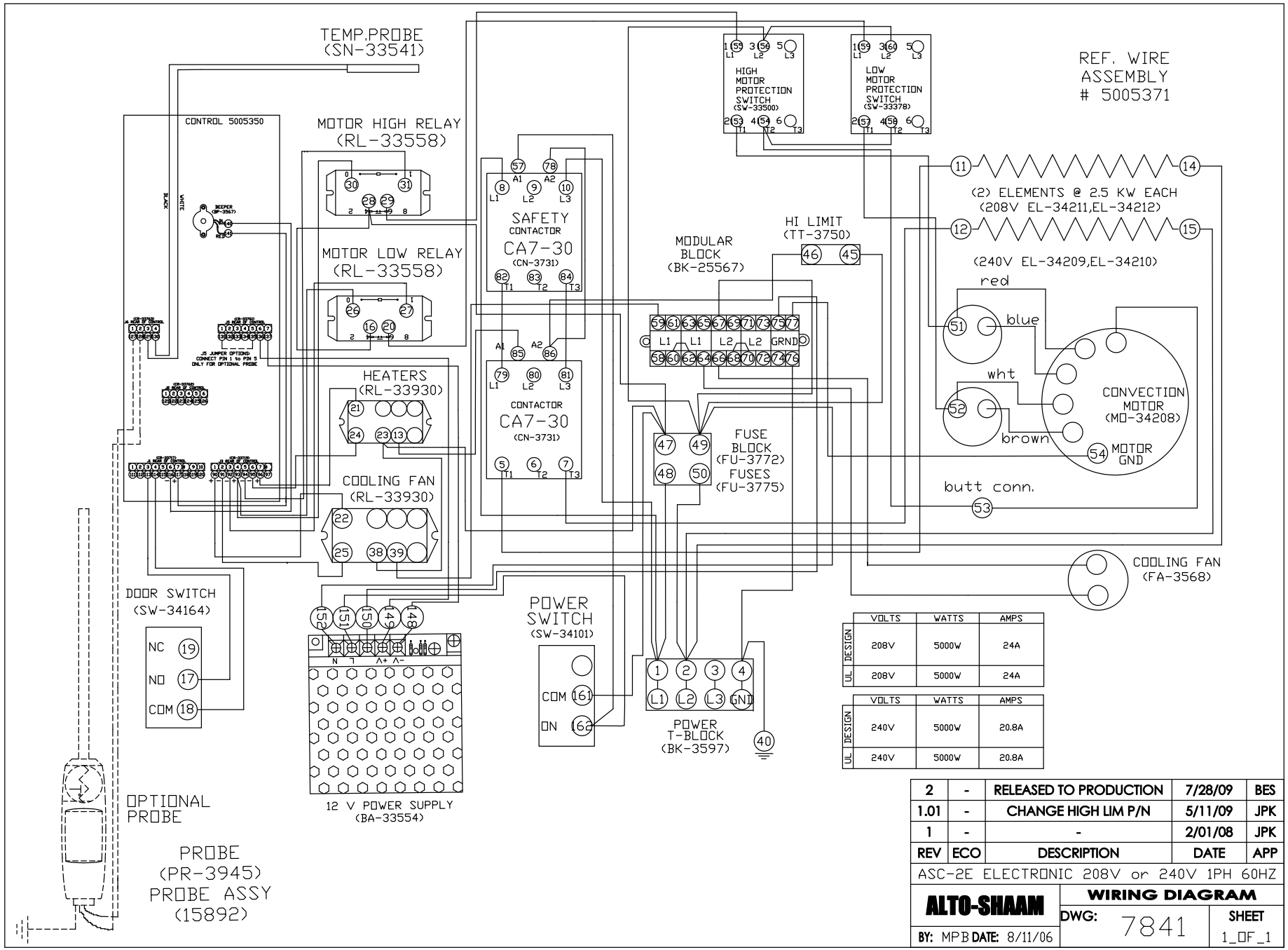
DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

Part numbers and drawings are subject to change without notice.

PARTS LIST

Description	ASC-2E	ASC-4E	Qty.
Exterior			
Panel, Top and Side	1005455	1006623	1
Gasket, LH/RH	1005311	1006605	2
Gasket, Top/Bottom	1005316	1006606	2
Panel, Service, louvered	1006602	1006672	1
Cover, Bottom	1005458	1006678	1
Cover, Top	1005459	1006679	1
Vent Plate	1010943	—	1
Interior			
Rack, Side	SR-26893	SR-26396	2
Shelf	SH-26894	SH-26795	5 / 6
Lamp, *CT, snap-in, oven light	—	LP-34161	2
Gasket, oven lamp receptacle	—	GS-26630	2
Glass, *CT, oven lamp	—	GL-26608	2
Cover for oven light	—	CV-26607	2
Bulb, 230/240V, 25W	—	LP-34206	2
Oven Elements			
Element, Outer, 208V	EL-34211	—	1
Element, Outer, 240V	EL-34210	—	1
Element, Inner, 208V	EL-34212	—	1
Element, Inner, 240V	EL-34209	—	1
Element, Front, 208V	—	EL-34126	1
Element, Front, 240V, 220V	—	EL-34129	1
Element, Front, 480V	—	EL-34347	1
Element, Middle, 208V	—	EL-34127	1
Element, Middle, 240V, 220V	—	EL-34146	1
Element, Middle, 480V	—	EL-34346	1
Element, Rear, 208V	—	EL-34128	1
Element, Rear, 240V, 220V	—	EL-34125	1
Element, Rear, 480V	—	EL-34345	1
Motor/Blower Wheel			
Convection Motor, 115V	MO-34208	MO-34790	1
Convection Motor assembly 125V	—	5010354*	1
Wheel, Blower	WH-26895	WH-26405	1
Door Assembly			
Assembly, Complete	DR-27848	—	1
Assembly, Complete, RH	—	DR-27849	1
Assembly, Complete, LH	—	DR-27850	1
Electrical View			
Block, Terminal	BK-3597	BK-3597	1
Block, Modular	BK-25567	BK-25567	1
Contactors, *CT, 240V, 50A	CN-3731	CN-3731	1 / 2
Fan, Box, 35CFM, 230V, 50-60HZ	—	FA-3974	1
Fan, Box, 70CFM, 230V, 50-60HZ	FA-3568	—	1
Fuse Holder, Dual, 15A, Class G	FU-3772	FU-34771	1
Fuses, *CT, 15A, Class G	FU-3775	FU-34772	2
Guard, Fan	GD-2396	GD-2396	1
Motor Relay, High & Low	RL-33558	RL-33558	2
Panel Overlay	PE-26977	PE-26977	1
Power Supply	BA-33554	BA-33554	1
Switch, Rocker, Fan, high/low	—	SW-34101	1
Switch, On/Off/Cool-down	SW-34112	—	1
Switch, High Limit	TT-3750	SW-34150	1
Switch, Door, Roller	SW-34164	SW-34164	1
Switch, Motor Protect	SW-33500	—	1
Switch, Motor Protect	SW-33378	—	1

*Prior to serial number 870689



	VOLTS	WATTS	AMPS
DESIGN	208V	5000W	24A
UL	208V	5000W	24A

	VOLTS	WATTS	AMPS
DESIGN	240V	5000W	20.8A
UL	240V	5000W	20.8A

REV	ECO	DESCRIPTION	DATE	APP
2	-	RELEASED TO PRODUCTION	7/28/09	BES
1.01	-	CHANGE HIGH LIM P/N	5/11/09	JPK
1	-	-	2/01/08	JPK

ASC-2E ELECTRONIC 208V or 240V 1PH 60HZ

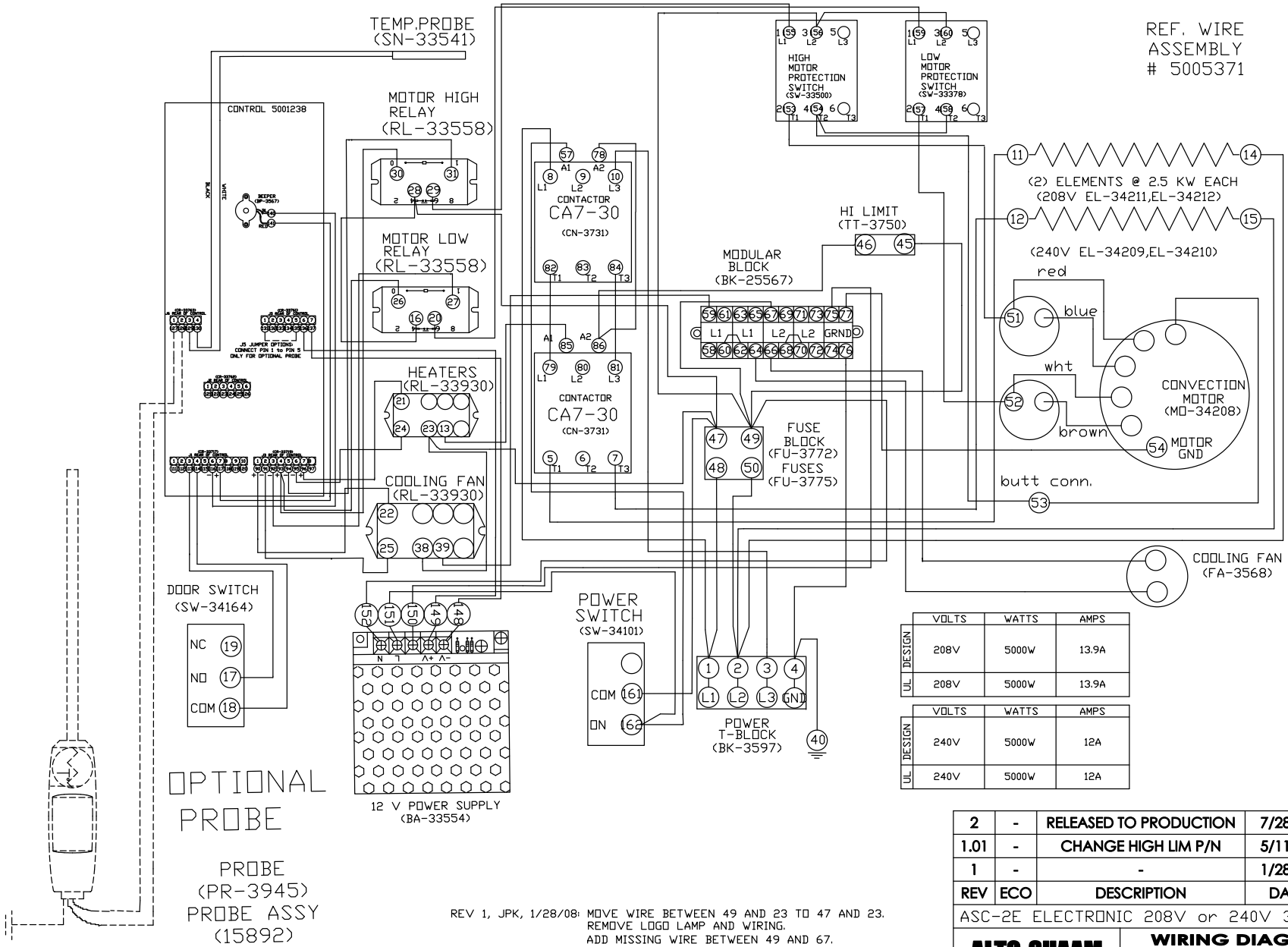
ALTO-SHAAM

WIRING DIAGRAM

BY: MPB DATE: 8/11/06

DWG: 7841

SHEET 1_OF_1



UL DESIGN	VOLTS	WATTS	AMPS
	208V	5000W	13.9A
	208V	5000W	13.9A

UL DESIGN	VOLTS	WATTS	AMPS
	240V	5000W	12A
	240V	5000W	12A

REV 1, JPK, 1/28/08: MOVE WIRE BETWEEN 49 AND 23 TO 47 AND 23.
REMOVE LOGO LAMP AND WIRING.
ADD MISSING WIRE BETWEEN 49 AND 67.
FIX JUMPER J5 COMMENT.
CLEAN UP CONTACTOR WIRING.
ADD POWER RATING BLOCK.

REV	ECO	DESCRIPTION	DATE	APP
2	-	RELEASED TO PRODUCTION	7/28/09	BES
1.01	-	CHANGE HIGH LIM P/N	5/11/09	JPK
1	-	-	1/28/08	JPK

ASC-2E ELECTRONIC 208V or 240V 3PH 60HZ

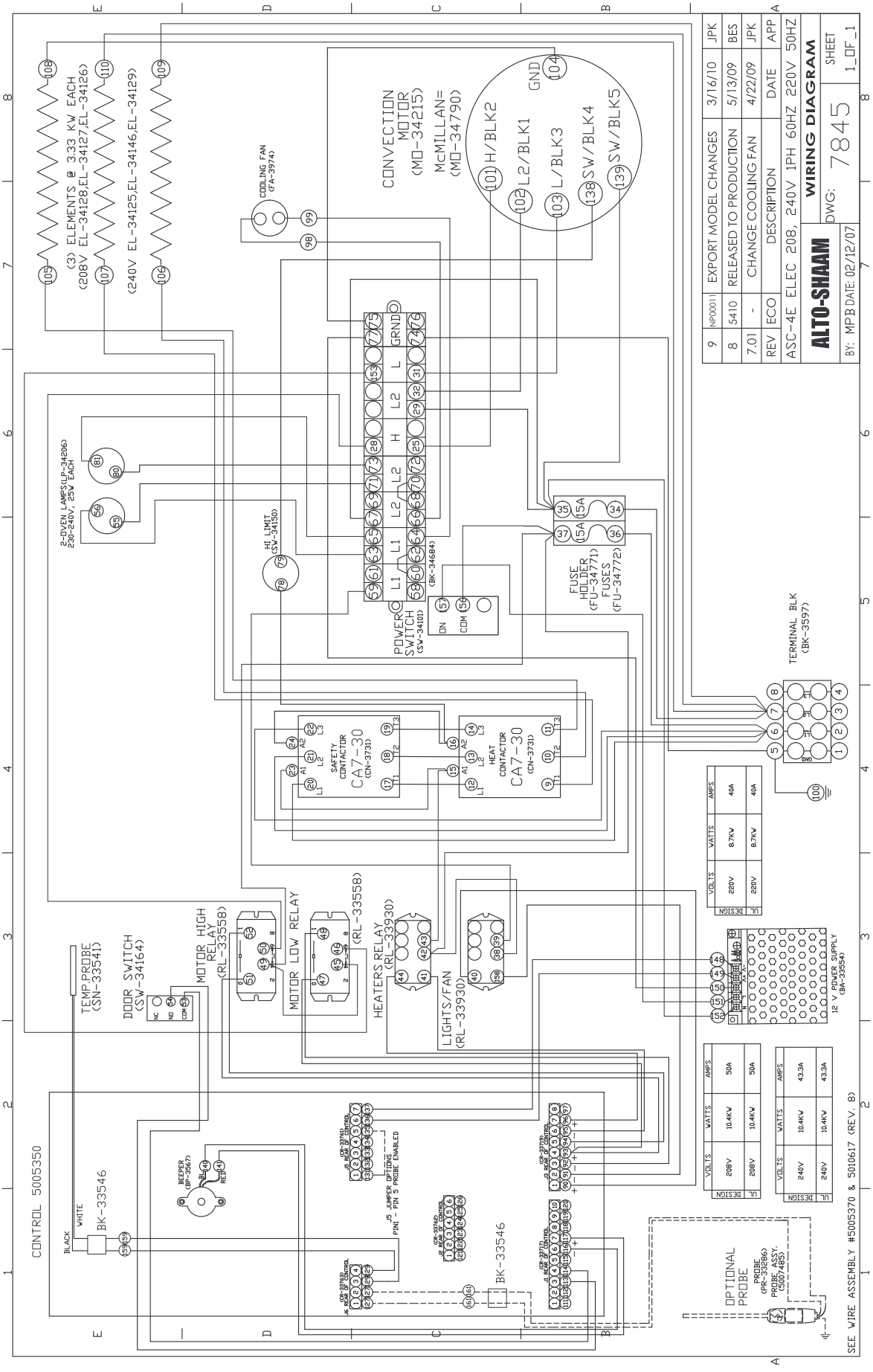
ALTO-SHAAM

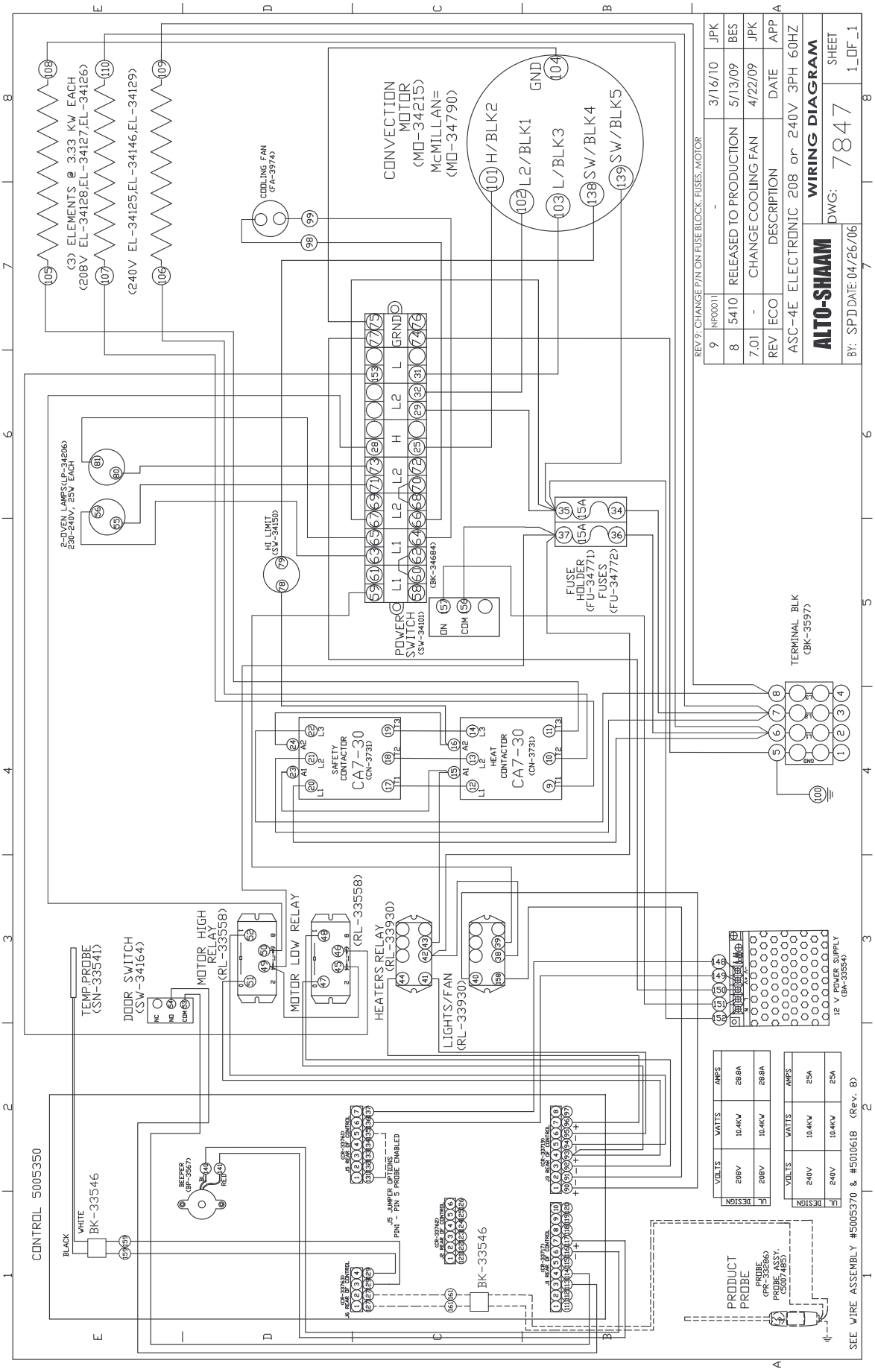
WIRING DIAGRAM

BY: MPB DATE: 1/25/08

DWG: 7843

SHEET 1_OF_1


ASC-4E ELEC 208, 240V 1PH 60HZ 220V 50HZ
ALTO-SHAAM
WIRING DIAGRAM
DWG: 7845
SHEET 1_OF_1
BY: MPB DATE: 02/12/07
REV | ECO | DESCRIPTION | DATE | APP
7.01 | - | CHANGE COOLING FAN | 4/22/09 | JPK
8 | 5410 | RELEASED TO PRODUCTION | 5/13/09 | BES
9 | NP00011 | EXPORT MODEL CHANGES | 3/16/10 | JPK
CONTROL 5005350
BK-33546
(3) ELEMENTS @ 3.33 KW EACH
(208V EL-34128,EL-34127,EL-34126)
(240V EL-34125,EL-34146,EL-34129)
CONVECTION MOTOR (MO-34215)
McMILLAN= (MO-34790)
H/BLK2
L2/BLK1
L/BLK3
SW/BLK4
SW/BLK5
GND
COOLING FAN (FA-39742)
2-OVEN LAMPS(LP-34206) 230-240V, 25W EACH
HI LIMIT (SW-34150)
POWER SWITCH (SW-34101)
(BK-34684)
FUSE HOLDER (FU-34771) FUSES (FU-34772)
TERMINAL BLK (BK-3597)
SAFETY CONTACTOR CA7-30 (CN-3731)
HEAT CONTACTOR CA7-30 (CN-3731)
TEMP.PROBE (SN-33541)
DOOR SWITCH (SW-34164)
MOTOR HIGH RELAY (RL-33558)
MOTOR LOW RELAY (RL-33558)
HEATERS RELAY (RL-33930)
LIGHTS/FAN (RL-33930)
BEEPER (BP-3567)
J5 JUMPER OPTIONS
PIN1 - PIN 5 PROBE ENABLED
12 V POWER SUPPLY (PA-33554)
OPTIONAL PROBE
PROBE (PR-33286)
PROBE ASSY. (5007485)
SEE WIRE ASSEMBLY #5005370 & 5010617 (REV. B)
VOLTS | WATTS | AMPS
208V | 10.4KW | 50A
240V | 10.4KW | 43.3A
220V | 8.7KW | 40A


CONTROL 5005350
(3) ELEMENTS @ 3.33 KW EACH
(208V EL-34128,EL-34127,EL-34126)
(240V EL-34125,EL-34146,EL-34129)
CONVECTION MOTOR (MD-34215) McMILLAN= (MD-34790)
H/BLK2
L2/BLK1
L/BLK3
SW/BLK4
SW/BLK5
GND
COOLING FAN (FA-33743)
2-OVEN LAMPS(LP-34206) 230-240V, 25W EACH
HI LIMIT (SW-34150)
POWER SWITCH (SW-34101)
(BK-34684)
FUSE HOLDER (FU-34771) FUSES (FU-34772)
TERMINAL BLK (BK-33597)
SAFETY CONTACTOR CA7-30 (CN-33731)
HEAT CONTACTOR CA7-30 (CN-33731)
TEMP.PROBE (SN-33541)
DOOR SWITCH (SW-34164)
MOTOR HIGH RELAY (RL-33558)
MOTOR LOW RELAY (RL-33558)
HEATERS RELAY (RL-33930)
LIGHTS/FAN (RL-33930)
12 V. POWER SUPPLY (BA-33554)
BUZZER (BP-33567)
WHITE BK-33546
BLACK
RED
BK-33546
PRODUCT PROBE
PROBE (PR-33266)
PROBE ASSY. (PRB-33267)
J5 JUMPER OPTIONS
PIN 1 - PIN 5 PROBE ENABLED
VOLTS 208V 10.4KW 28.8A
VOLTS 240V 10.4KW 25A
SEE WIRE ASSEMBLY #5005370 & #5010618 (Rev. 8)
REV 9: CHANGE P/N ON FUSE BLOCK, FUSES, MOTOR
9 NP0011 - 3/16/10 JPK
8 5410 RELEASED TO PRODUCTION 5/13/09 BES
7.01 - CHANGE COOLING FAN 4/22/09 JPK
REV ECO DESCRIPTION DATE APP
ASC-4E ELECTRONIC 208 or 240V 3PH 60HZ
ALTO-SHAAM
WIRING DIAGRAM
DWG: 7847
SHEET 1_OF_1
BY: SPD DATE: 04/26/06

TRANSPORTATION DAMAGE and CLAIMS

All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
3. Note all damage to packages directly on the carrier's delivery receipt.
4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.
5. If the driver refuses to allow inspection, write the following on the delivery receipt:
   Driver refuses to allow inspection of containers for visible damage.
6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.
7. Save any packages and packing material for further inspection by the carrier.
8. Promptly file a written claim with the carrier and attach copies of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

LIMITED WARRANTY

Alto-Shaam, Inc. warrants to the original purchaser only that any original part that is found to be defective in material or workmanship will, at Alto-Shaam's option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

The parts warranty period is as follows:

For the refrigeration compressor on Alto-Shaam Quickchillers™, five (5) years from the date of installation.

For the heating element on Halo Heat® cook/hold ovens, as long as the original purchaser owns the oven.

For all other parts, one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.

To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

THIS WARRANTY DOES NOT APPLY TO:

1. Calibration.
2. Replacement of light bulbs, door gaskets, and/or the replacement of glass due to damage of any kind.
3. Equipment damage caused by accident, shipping, improper installation or alteration.
4. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
5. Damage incurred as a direct result of poor water quality, inadequate maintenance of steam generators and/or surfaces affected by water quality. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
6. Damage caused by use of any cleaning agent other than Alto-Shaam's Combitherm® Cleaner, including but not limited to damage due to chlorine or other harmful chemicals. **Use of Alto-Shaam's Combitherm® Cleaner on Combitherm® ovens is highly recommended.**
7. Any losses or damage resulting from malfunction, including loss of product or consequential or incidental damages of any kind.
8. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts including legs, or addition of any parts.

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Alto-Shaam be liable for loss of use, loss of revenue or profit, or loss of product, or for any indirect, special, incidental, or consequential damages. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

Effective 09/10

ALTO-SHAAM®

RECORD THE MODEL AND SERIAL NUMBER OF THE APPLIANCE FOR EASY REFERENCE.
ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBER IN ANY CONTACT WITH ALTO-SHAAM REGARDING THIS APPLIANCE.

Model: _____ Date Installed: _____
Voltage: _____ Purchased From: _____
Serial Number: _____

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